



**MINUTES  
DEVILS LAKE WATER IMPROVEMENT DISTRICT  
REGULAR MEETING**

**COUNCIL CHAMBERS, CITY HALL, 3<sup>rd</sup> Floor  
April 5, 2012  
6:00 P.M.**

**PRESENT:** David Skirvin  
Brian Green  
Noel Walker  
Kip Ward  
Randy Weldon

**ABSENT:** None

**AUDIENCE:** Don Sell, Larry Brown, Raylene Erickson, Mitchell Moore, Mark Christie, Larry Rich, Mark Alder, Chester Noreikis

**STAFF:** Paul Robertson, Lake Manager; Seth Lenaerts, Project Manager

**MEDIA:** None

Skirvin called the regular DLWID Board of Directors meeting to order at 6:00 P.M.

**Consent Agenda**

Minutes of the Previous Meeting. Skirvin asked for a vote on approval of the Minutes from March. The vote to approve was unanimous. Financial Report discussion was postponed to the end of the meeting.

**Public Comment**

**Larry Brown:** Has been opposed to the septic system inspection program and the plan to shut off residents' water for non-compliance. He said if it was a sure thing that this program would improve lake water quality, he would not be so opposed. He reiterated the opinions of several people who feel the septic systems are not a huge issue; he said that 30% of Oregon's residents have septic systems. Again, he said he is adamantly opposed to the septic system inspection program. A second issue that Larry Brown discussed was the floating logs and debris in and around the lake that pose a danger to boaters. He suggested the Board talk to the city and then determine if there is a central location to which the logs could be dragged and dumped. In the past, some logs were towed

to an area near Regatta Grounds. He said Bill Sexton indicated that the logs could be chipped at a reasonable cost. He would like to see the logs removed before May 1<sup>st</sup> and volunteered to assist in the effort.

**Mark Christie:** In December, he said he voiced an opinion on the erosion study issue. Some people felt that the dialog with Tetra Tech indicated that they had not provided all the information requested by the District. Now, he heard that there are new findings and new data and believes that these are the same issues that the Board has been discussing for years. He wants to know who provided the “new data” that, since December, is now contained in the report. He would like to know if the new data is verifiable or if it was just “manufactured” by someone. Who provided the new data that was not available in the past? Where did it come from?

**Mitchell Moore:** (Also, see Mitchell Moore’s document at the end.) Regarding lake levels, he believes a more specific study is needed on lake level. There are 117 references to “level” in the report. There are no recommendations to lowering the lake. He suggested the Board not draw any conclusions from this report. He agrees that Tetra Tech should be paid. He believes that the dam should be installed on or near April 15. Neither version of the erosion study supports lowering the lake. So, he said the Board should stop trying to adjust the lake level. To make any changes, the Board should have public support. Otherwise, they will alienate the public and risk a law suit.

**Larry Rich:** Complained that when the lake is at 9 feet, he cannot get his boat out of his boat slip. He lives on Thompson Creek and it’s always off the charts with toxins because of a resident who owns five dogs. He said the sample should be taken from the other side of East Devils Lake Road. He would like to see it taken where the channel comes into the lake. Staff can come onto his private property anytime to access a location.

**Mark Alder:** He said he is from Tigard, but that his family (He is the 3<sup>rd</sup> generation) has a house on Loop Drive and thus apparently is a member of the Sandpoint coalition. Through the years, he has seen quite a few changes as he has been coming to the lake for 60 years—sea walls and boat ramps have been installed and he was here prior to the dam installation. Before the dam, by August he said, they would have 5-6 feet of beach in front of their house, which was fine, because they had a dock that extended out far enough to use their boats. He said that the dam was originally in place for the grass carp, but that later it was his understanding that the dam was put into to keep the depth of lake deep enough to discourage weed growth, and that to him lowering the lake would seem to promote weed growth, which is a multi-factorial thing. The lake has always been a multiple-use lake. Remembers when they killed all the fish in the lake because they were ruled “trash” fish. He continued to say that changing one thing always affects more than one person and that it has ripples throughout the lake. Consider how many people use the lake and work to maintain lake levels so that everyone can use the lake, fish on, water-ski, wakeboard, & sail on. He further commented that he brings a certain historical view. Suggesting that for one he doesn’t have to be 90 years old to have 60 year old septic system. He urges the Board to consider multiple factors when they make a change to prevent unintended consequences.

## Unfinished Business

### **The Devils Lake Plan**

#### **Septic Tank Revitalization Program (Lenaerts)**

No update.

#### **SOS--Save our Shoreline Campaign (Lenaerts)**

The class was conducted and Lenaerts thanked all those who contributed to its success. He said after some editing, the video will be placed on Channel 4 as well as on the website. Five people attended; however, from five to 12 are always the expectations. The mailers were sent out and some of those who received the mailers expressed appreciation. Lenaerts would like to conduct this class twice a year. He said they did receive a request for a site evaluation for landscaping.

#### **Save Our Shoreline Video**

This would be a 10- to 15-minute outreach video on landscaping for which the Board expressed an interest. Lenaerts reported that he discussed the project with a film maker with a brief overview of what would be entailed. He asked if the Board wished to pursue this effort. If so, he will research and come back with options for price ranges of from \$500 to \$1,500.

Skirvin said to bring some options and they will discuss if they wish to proceed.

#### **Vegetation Management**

Re Grass Carp, Robertson said that Joe Eilers, the consultant from Max Depth Aquatics, reports that he is continuing to work through some of the items that will assist the District with ODFW. He and Robertson will meet in Newport to search ODFW files for relevant documents that might not be on hand or published.

The primary issue now is the value of creating a model as part of the Grass Carp Application or as part of a larger long-term watershed approach.

Some options are the Stella model (\$15,880)—this model would be applicable for the grass carp; the CE-QUAL-W2 (119,596); and the SWAT (\$45,885).

Eilers has suggested a Bayesian neural network (BNN) model. This model is better and cheaper. He estimates that for \$3,300, he believes he could tie in fish interactions and vegetation growth and show what the probabilities would be, and probabilities would include a range.

Robertson said the BNN model would add 10 percent to the cost of the project.

Green asked if Robertson has seen the model used previously and he said he had not.

Robertson said inputs are estimates; however, the use of ranges of possibilities in the equation creates a better estimate.

Skirvin asked what the time element would be for the use of this tool. Robertson said it would not require much of a time investment—possibly 32 additional hours. He does not know where the 32 hours would fall into the time table. Robertson said that the decision wouldn't have to be made immediately. The contract is 20 percent completed, and there would be time to dig up some additional information on the model, which he will try to do.

Green said the point of hiring Eilers is so that he could defend inputs more effectively than anyone else and he is now recommending a model that is quite inexpensive.

Robertson said that Eilers is a well-respected limnologist and has worked with nearly all the models, including the Diamond Lake project. Joe's son who also is part of MaxDepth Aquatics, Inc. has used most of the models.

**Green moved to authorize up to \$3,500 for the Bayesian neural network model, specifically for the grass carp project application. The motion was seconded by Walker. Vote: Unanimous. Motion carried.**

#### **Diver Assisted Suction Harvesting (DASH)**

This item will be discussed at next month's meeting.

#### **Sewer (Brian Green)**

Robertson reported that the District sent the signed letter to City Manager David Hawker regarding the proposed alternative sewer and paving project. The letter focused on the environmental benefits of the Local Improvement District in reducing the nutrient loading from septic tanks and the improvements over traditional development due to the narrow-street footprint as well as the social and economic factors of the project. One focus was the allowance of a phased-in approach to connecting to the sewer by property owners. DEQ requires a property owner with an existing septic system hook up to sewer when there is adequate sewer access within 300 feet of the property and only when there is a permit required for an upgrade or repairs of an existing septic system. Robertson has not heard back from the City; however, he is aware that the City did receive the letter because he spoke with the city engineer, who said that they were working on the issue. Robertson is hopeful for an August beginning of the project. He said he and Green might have to go to the City Council to address the 15 steps of the project. Green said it seems the city manager's primary concern is how quickly the city can recover its initial investment in the project. (This was addressed in the letter.) The entire cost of the project will be repaid with interest. And, system development charges and sewer charges will be an additional fee. It's the short-term return that concerns the city manager.

Green said it would be easier if the city could fund the project internally. Outside funding has not been explained to Green. There was discussion previously about the internal funding coming from a specific fund and Green said the city staff talked about using the capital improvement fund. The cost of the project slightly exceeds the annual amount of the capital improvement fund and Green believes the project could be divided into two parts—sewer the first year and paving the second year, with each half being supported by the capital improvement fund. He said we need to work on the project being paid for from that fund.

#### **Erosion Study**

Robertson showed a PowerPoint presentation on the final submission from Tetra Tech on the Shoreline Erosion Study—a review of the contract demonstrating the completeness of the additional major findings.

The contract was signed on 12/29/10 with Tetra Tech for \$28,840 16 months ago.

The contract was broken down into six tasks.

*Historical Lakeshore Review.* Photos of history from 1939 to present. Robertson showed the photos of the lake from 1939 to the present. They are all on the website.

*Ground Truth Shoreline Soils and Vegetation.* Some of the conditions were shown in slides.

*Photographic Survey and Characterization.*

*Inundation Maps.* Tetra Tech showed the 100-year flood at 17 feet rather than the correct 14 feet based on the map projection in use for the other lake levels.

*Wave Action Analysis.* They were supposed to show wave action, which was not completed as expected.

*Written Report.*

All of the information is available on the website.

Ward asked about the wind direction clarification. Robertson said that in the summer, winds come from the northwest, and in the winter, from the southwest. We expect stronger winds in the winter from the southwest; however, a gentler wind also hails from the northeast in winter.

Extensive discussions ensued on wave energy.

Robertson said that May and June show the highest average lake levels. The average lake level in January is 9.5 feet and the range is greater. July (and August) shows the lowest rainfall; however, 10% of the time in the summertime, the lake level exceeds 10.8. Ten out of the last 14 years, summer-time lake levels are higher than winter-time lake levels much of the time.

**Recommendations and Considerations:**

- Predominate wind direction, wind speed and fetch, major drivers of erosion
- 10% of winter, lake above Ordinary High Water, sets up greatest potential
- Shoreline characteristics vary widely
- Coordinate with ODFW and DSL for permits
- Reduce overland flow (runoff) to prevent erosion
- Active shoreline restoration
- Remove invasives, replant native species
- Operational options that would lessen shoreline erosion are limited to 18 inches
- Relatively increased erosion seen in areas affected by summer winds
- More bank stabilization seen in areas affected by winter winds
- Boat wakes most significant impact in sheltered areas

Check out DLWID Projects page, erosion study. Entire information is available on line.

Green would like Robertson to check with Tetra Tech and have them verify that there are no additional “typos,” and confirm this in writing.

**Green moved to have the District pay Tetra Tech for their work per the contract with the addressed “typo” question answered. Skirvin seconded the motion.**

Robertson said he would ask Tetra Tech for clarification on the equation for a mix based on the number of wake boarders vs. ski boats. On an average day, if there are 3 wake surfers out there vs. 20 ski boats, we need a percentage.

**Vote: Unanimous. Motion carried.**

Walker said that one of his docks had been destroyed by the wind. Discussion ensued on where waves go if they are not absorbed by the wall barriers in the lake. Robertson said that they flow down and along the shoreline. Waves also collide with incoming waves which can cause interference.

There was further discussion on wave harmonics and dissipation. Wave energy is ultimately dissipated by gravity as water is quite heavy.

Regarding the dam, normally the metal stanchions are installed on April 15. Walker said there is ample water in the lake at this time. Robertson said that Bill Sexton would not want to get into the lake when three feet is going over the dam. It was decided that the installation would be postponed until at least May.

## **Communications Report**

Robertson showed a slide of the brochure of the 25-year celebration of Oregon Coast Community College. Robertson will be teaching one of the community outreach classes—Understanding Water Quality. The public can sign up at with OCCC. The class will be one day, May 23 from 6:00 to 8:50 PM. It is an opportunity for the public to learn about water quality parameters.

Robertson thanked Lenaerts for creating the Clearwater Spring E-Newsletter. To receive a copy of this e-newsletter, a copy of the monthly minutes and to be included on the mailing list, people need to go to the website, click on “Join our e-mail list,” and check the options.

Robertson will be on the KBCH again on Tuesday. It is called the Good Morning Wake-Up show and he has a standing spot the second Tuesday of the month; a podcast is available from KBCHam.com. Last month, Lenaerts was the guest.

Robertson was the guest of Interim President of OCCC on the March 16 OCCC “On the Air” live broadcast.

## **Safety Report**

No accidents.

## **MidCoast TMDL**

The initial meeting took place on March 20, 2012 with more than 60 people in attendance, including the stakeholders. Future meetings will be held on the third Wednesday of the month. One will be on the north end and another in Florence and it will be an 18 to 24-month process.

Devils Lake is listed for Chlorophyll a and pH and Thompson Creek is listed for fecal coliforms, and as a local government, we have been invited to participate to get an idea of the Total Maximum Daily Load for the entire mid-coast watershed. We will provide a link in our website to help people follow along so that they can learn about the process.

## **Glossary**

On the Research page of the website, Robertson said the Glossary is 75 to 80 percent completed with the terms that were previously listed. He said the Glossary will help with some of the technical documents.

## **Internship-Summer 2012**

Robertson said that the internship information can be downloaded from the website. He will have some recommendations in May; some of the applicants could start as early as mid-May, which is the goal. He said there were some exceptional people from as far away as New Hampshire interested in the program. Skirvin suggested that Robertson let the Board know when he will be conducting interviews in the event that any of the Board members wish to join the interview.

## **New Business**

### **Devils Lake Revival**

The Festival is the revived Grass Carp Festival. Last year, more than 200 people attended the festival that included pontoon boat tours, kayak tours, paddle-board demos, a sailing race, live music, interactive booths, children’s activities and a grand-prize raffle of a kayak, permit and vest. Lenaerts said last year’s cost was \$3,000, and this year should be about the same. He said the best options for festival dates are one weekend in July and two weekends in August that appear to be open from other community activities. He suggested August 4.

**Green moved to schedule the Devils Lake Revival on August 4, 2012. Skirvin seconded. Vote: Unanimous. Motion carried.**

### **Lincoln City's Comprehensive Plan**

The Lincoln City Planning Commission recently placed the Comp Plan on their agenda for city overall planning. Robertson said some of the comments at the recent planning meeting included sewers, septic, stormwater, wetlands, shoreline buffers and the prospects of a phosphate-free fertilizer ordinance—all items in the Devils Lake Plan. As they move forward, the Board asked that Lenaerts remain current on the issues and keep the Board and Robertson apprised on what is happening. Green asked if the information can be found on the City's website; Lenaerts said he believes it can.

### **Water Quality**

Robertson attended a meeting of the Harmful Algae Bloom Surveillance (HABs) stakeholder group at Lane Community College. The meeting was attended by the Oregon Health Authority (OHA), DEQ, natural resource managers, Army Corps of Engineers and U.S. Forest Service. The only issue relevant to Devils Lake is the introduction of new guidelines for toxin monitoring.

If we have a bloom of blue-green algae (cyanobacteria) that produces one or more of the specified toxins and we go under an advisory, the District would be required to show that the values were below all the standards before lifting an advisory. Applicable toxins would be determined by the blue-green algae present and the toxins they produce. OHA is requiring monitoring for four toxins. Discussions continued about the types of toxins for which the tests will be done. Robertson said that staff takes a proactive approach in monitoring for microcystin because it is done in-house. He said last year he searched for a commercial lab and found it would cost about \$250 for analyzing one sample of Anatoxin. Kits are available for the other two toxins that may or may not be sampled for. By partnering with King County, Washington's lab, significant savings can be realized and they test more efficiently. Robertson recommends the Board approve signing an agreement that will be needed to move forward at the price indicated in the manager's report.

He would recommend this for the delisting requirement. He would wait as long as possible to submit samples to ensure that the counts are down. It is a method of getting off the list if we are not monitoring internally.

Last year, the requirement was to monitor for two toxins. To get off the Anatoxin-A list, we had to show it was not present. The state now requires that as long as you are under the threshold, you are off the list and the recreational guideline is 20 parts per billion. The State of Washington funds monitoring of most of their lakes.

**Green moved to authorize the lake manager to sign an agreement with the King County lab and to spend up to \$3,000 annually for toxin testing as needed for analysis of toxins that we are not able to test in-house to become delisted. Skirvin seconded the motion.**

Robertson said it would be a possible two-day turn-around for results. Weldon asked, "Would we have had to mail any samples to King County lab during the last two years?" Robertson replied, "No." **Vote: Unanimous. Motion carried.**

Robertson brought up the issue of signage around the lake. He said the state is making some changes on their signage. He said some of the signs that are currently installed are pretty shabby. He said he could obtain 24 replacement signs (two of each kind—blue for *E.coli* and yellow for the

HABs) for about \$1,000 and use them for replacements and install the new ones while the others are being renewed. He said the District currently has no extra replacement signs at this time. The old ones can be removed and renewed while the new ones are installed and they can be alternated each year. He feels the signs reflect on our water quality program. The shabby signs have to be repainted and cleaned and new plastic covers installed. After discussion, the board decided not to authorize replacement of all the signs.

**Skirvin moved to authorize up to \$300 to replace or repair current signage, as needed. Walker seconded the motion. Vote: Unanimous. Motion carried.**

### **Riparian and Wetland Protection**

Lenaerts said there have been questions about shoreline development and building in Natural Resource Overlay zones. Lincoln City has designated zones and maps for such.

Riparian means the area adjacent to a river, lake or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. Zones can overlay other zones.

Wetland means an area that is inundated or saturated by surface or ground water at a frequency of duration to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Significant Wetland significant means a wetland shown on the significant natural resources map in the comprehensive plan.

There are additional restrictions to developing in a wetland overlay zone. We have a significant wetlands area, but nobody has checked out each site and conducted a survey. If you want to do anything on specified land, you must obtain wetland delineation proof that the area is not in a wetland significant area. When it comes to developing in Riparian and Wetland areas, you must submit for a permit to the City and/or DSL and have approval for development. The city does not have any criteria for riparian zones, only for wetlands.

As far as anything that the District can do if we discover that development is occurring in these zones, we can request notification if someone submits an application for developing in these areas. We could create an informational brochure and request that the City give it to property owners. It could discuss low-impact development, stormwater treatment and protection of current vegetation. Going a step further, we could look at ordinances; however, the big thing is to protect native vegetation in wetland areas—this is only applicable within the city, not within the county.

Green asked about the length of time available for commenting on an application.

Robertson said the process of delineating whether you have wetlands on your property is pretty much internal with the state and the property owner. It is external if there is a wetland and that process usually has a 30-day comment period. That is applicable to any removal/fill project. We are signed up with the state lands to be informed.

Discussion ensued about the funds the city has set aside to purchase open space—easements and parcels for purchase can be a tool for protection of wetlands.

Green said the District should ensure placement on the list for notification and then assess the situation when we are notified; then write a letter, if it is indicated. We would have to evaluate it on a case-by-case basis.

Skirvin cautioned to remain mindful of the property owner's rights and try not to be too critical.

## **Non-Agenda Items**

### **Financial Report**

Skirvin asked about the three pending separate payments listed for Tetra Tech to pay for their contract; Robertson explained that the total was broken up to keep each check amount within the District's limit of disbursement through TLC.

**Board voted unanimously to adopt the financial report as submitted.**

### **Public Comment**

**Mitchell Moore:** Expressed concern about a public document being placed online that vilifies wake board boats. He feels that the conclusion is purely speculative and was not evaluated scientifically. He believes the information and photos about wake boarders was supplied to Tetra Tech. He said a scientific study was conducted in 2008 on wake board boats using techniques that were designed by the Army Corps of Engineers, and wake board boats do not make a 4-foot wave. He noted that Tetra Tech also noted that their information could not be proven.

**Mark Christie:** Agreed that there is no way a wake board boat makes a 4-foot wave. He said the recreation period, rather than being from April 15 through October 15, is more accurately from mid-June through mid-September. He has had lake property for 18 years and feels that anyone who recreates mid-week can pretty much have the lake all to themselves. There are also very few weekends that the lake is busy enough to compare it to a river or another water way. I encourage you to reevaluate the recreation period and the number of boats. He said that during the mornings the ski boats are out and just sometimes you get wake-board boats. The average speed is going to be from 25 to 35 miles per hour.

### **Board Comments**

Kip Ward thanked Robertson for addressing questions and issues. He said the insinuation that "things are being manipulated" is just not true. As a new board member, he believes that there is no manipulation of data or any information. He is hopeful that future processes can be conducted with good spirit.

### **Announcements**

May 10, 6:00 P.M. is next month's meeting date, this is the second Thursday of the month.

The Budget Committee meeting will be held on May 11 at 10:00 A.M. Both meetings will be held at Lincoln City's Council Chambers.

### **Adjournment**

The meeting adjourned at 9:30 PM.

Respectfully submitted, Linda Burt

To my Friends at DLWID:

After my review of the upcoming meeting material, it seems that comments are appropriate related to several topics on this month's agenda. In the interest of clarity, I am limiting my commentary to the Erosion Study and the related board actions proposed by staff. For your convenience, I am submitting my comments in written form. I would request that the chair recognize me during the public comment period so I may provide additional verbal comments for those viewing on Channel 4.

### **Comments on Erosion Study**

The recently re-released erosion study dated March 8, 2012 (version 2) was an interesting read but much like its predecessor (version 1), it provides little information that would compel the District to take action. This is due to the structure of the RFP, which only requested advice on one topic; specifically it requests, "from this overall erosion study the contractor will provide a summary of the data and conclusions drawn as to if and how the dam operation may be impacting the shoreline."<sup>1</sup> The document did not request that erosion identified by the study be quantified nor did it request the study supply suggestions or techniques that could be employed to prevent or mitigate erosion on Devils Lake.

The erosion study RFP had a very narrow focus. Given its single-mindedness, did the erosion study deliver an answer? The original study (version 1) made a real attempt as it concludes, "whether waves are generated by boats or wind, the highly erodible nature of the soils, the presence or absence of sufficient bank stabilization, and the bathymetric slope are likely more influential on shoreline conditions than relatively small changes in lake elevations."<sup>2</sup> The new study (version 2), after three months of input from the District fails to reach a specific conclusion. The report instead suggests more study is necessary, "Due to variability in factors that affect wave energy that impact the shoreline, the vertical zone over which that energy is focused, and the ability of the resulting waves to cause erosion, local quantification of this process can only be done through site specific analyses. This analysis should consider the specific near shore bathymetry of the lake, the alignment of the shoreline with respect to the predominant wind direction and angle of impact of boat waves, as well as topography, soils, vegetation, and the presence of man-made structures at and above the shoreline."<sup>3</sup>

A careful reading of the re-released erosion study (version 2) reveals many fascinating additions from the original study; these embellishments do not appear to contribute to the study's ability to draw a conclusion or make a specific recommendation related to lake level. Indeed, the revised erosion study contains 117 references to the term "level" in describing the height of Devils Lake. Six of those references are found in the summary, which is now titled "Recommendations and Considerations". This is the section that should answer the question "if and how the dam operation may be impacting the shoreline"<sup>1</sup>. It does not. The section contains no statement confirming or denying the impact lake level has on overall shoreline erosion. It does not contain a specific recommendation for an ideal lake level, nor does it recommend lowering the lake level.

The original study (version 1) committed to a thesis stating that other factors in the lake environment were more influential on shoreline erosion than small changes in lake levels. This is a conclusion that the District has rejected. The re-released erosion study (version 2) goes out of its way to avoid drawing any conclusion whatsoever. I would caution the DLWID board away from reading between the lines and drawing a conclusion where three professional scientists, engaged by the District have refused.

I have many other concerns related to the contents of the re-released erosion study (version 2) but it is my understanding from the staff report that a change in the authorized impoundment height is not being considered at this meeting. I will therefore withhold any further written comments until the District schedules a public hearing. As with the original study (version 1), I believe that the findings of the re-released erosion study (version 2) very clearly demonstrate that those public hearings will not be necessary.

### **Comments on Proposed Board Actions**

The Staff Report associated with the April meeting suggests that the board needs to take action on two items related to the erosion study.

1. Decision on the completeness of the contract and payment of the contractor.

Staff believes that the contract can be ruled complete and thus full payment should be issued to Tetra Tech, Inc. While the re-released erosion study (version 2) misses the mark absent a conclusion; I recognize that there were other deliverables subsequently forwarded to the District associated with the original contract that satisfy the majority of the RFP requirements.

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<sup>1</sup> DLWID RFP: Erosion Study – Page 4

<sup>2</sup> Devils Lake Shoreline Erosion Study (Version 1) Nov 18, 2011 – Page 2

<sup>3</sup> Devils Lake Shoreline Erosion Study (Version 2) Mar 08, 2012 – Page 2

I would agree that Tetra Tech should be paid and outstanding issues if any should be addressed by standard business decorum.

2. Direction on the installation of the dam prior to the May discussion.

Staff has recommended delaying the installation of the dam structure, normally placed on April 15<sup>th</sup> until after receiving public comment at the May 10<sup>th</sup> board meeting. The staff report states that the board would then "make a decision about the use of the dam this summer and thus its installation."<sup>4</sup> It is unclear in this statement if the height of the impoundment structure is to be considered or the use of an impoundment structure is to be considered in the May meeting.

I recommend that the District install the dam on the traditional timeline, on or near April 15<sup>th</sup>. Unless the District is seriously considering managing the summer recreational lake level without an impoundment structure it makes no sense to delay construction. Should the District make the unfortunate decision to reduce the lake water level from the currently authorized 9.53' MSL it can be easily adjusted with the structure in place as it is routinely done each summer?

I would further recommend that the District forgo any consideration of changing lake levels since previously provided public input has established a clear record on the negative impacts that such a change would have on recreational use of the lake while providing no predictable benefit in curtailing erosion. This would prove to be a very unpopular decision.

**Recommendation**

According to direct observations made during the study, approximately 65% of the shoreline has some measure of existing protection, consisting primarily of either concrete or wooden retaining walls or rock riprap, and the remaining 35% is unprotected containing no manmade structures.<sup>5</sup>

These undeveloped areas' soil type is composed of the Brallier unit (8A) that makes up about 21% of the shoreline, which is very erodible when bare, but tends to occur in low-lying, flat areas that are heavily vegetated such as the broad floodplain and wetland at the mouth of Rock Creek. Due to the characteristics of the areas where it occurs, there is very little development and a relatively small amount of protection.<sup>6</sup>

The District should suspend any future consideration of changing summer time lake levels and instead focus on developing mitigation techniques in those few areas where the shoreline is unprotected and there is some evidence that erosion is occurring at unnatural rates. Approximately half of the unprotected shoreline occurs in undeveloped areas owned by the State, City or Siletz Tribe.<sup>7</sup>

The District should adjust the current Save Our Shoreline program to meet this need. The program has already demonstrated that it can accomplish more working with governmental entities than homeowners with the construction of several demonstration projects on the lake. Using the SOS program, the District should forge a special relationship with the three landowners who own half of the unprotected shoreline on Devils Lake to determine how the District might assist in the protection of those natural areas. I have attached Figure 3, from the erosion study where you can quickly see what an impact such a program might have. Such a strategic partnership could develop into a major undertaking; perhaps a Rock Creek restoration project, which could include elevating East Devils Lake Road eliminating oil and road grime from entering the lake, construction of fish passages under the elevated roadway and perhaps even a public trail system highlighting the sensitive wetland areas with public informational displays.

**In Conclusion**

Neither version of the erosion study supports a decision to lower the lake level. The District must avoid acting on an unsupported agenda. Instead, the District should take the report and turn it into something positive. Create targeted erosion control projects; fix the areas shown on the attached illustration. Create a lasting legacy with the money invested on this report. Focus on improving our few compromised shorelines; show the public that this was tax money well spent. Finally, please give up once and for all, on these annual attempts to adjust the lake level. You know by now they are extremely unpopular. A lowered lake will result in real economic damage as it will restrain recreational use of the lake. Do not use your cash reserves defending the District and its board members in the lawsuit that will surely be the result of such an arbitrary decision.

<sup>4</sup> DLWID Staff Report April 5, 2012 - Page 5

<sup>5</sup> Devils Lake Shoreline Erosion Study (Version 2) Mar 08, 2012 – Page 6

<sup>6</sup> Devils Lake Shoreline Erosion Study (Version 2) Mar 08, 2012 – Page 9, Table 3

<sup>7</sup> Devils Lake Shoreline Erosion Study (Version 2) Mar 08, 2012 – Page 7, Figure 2

The District simply cannot accomplish its goals without a foundation of public support. A decision to adjust the lake level downward is a sure way to alienate and discourage lakefront residents and the general public. Concentrate your efforts on projects that have measurable results and avoid those that are based on speculative opinions with little guarantee of success. Thank you for your consideration of these comments.

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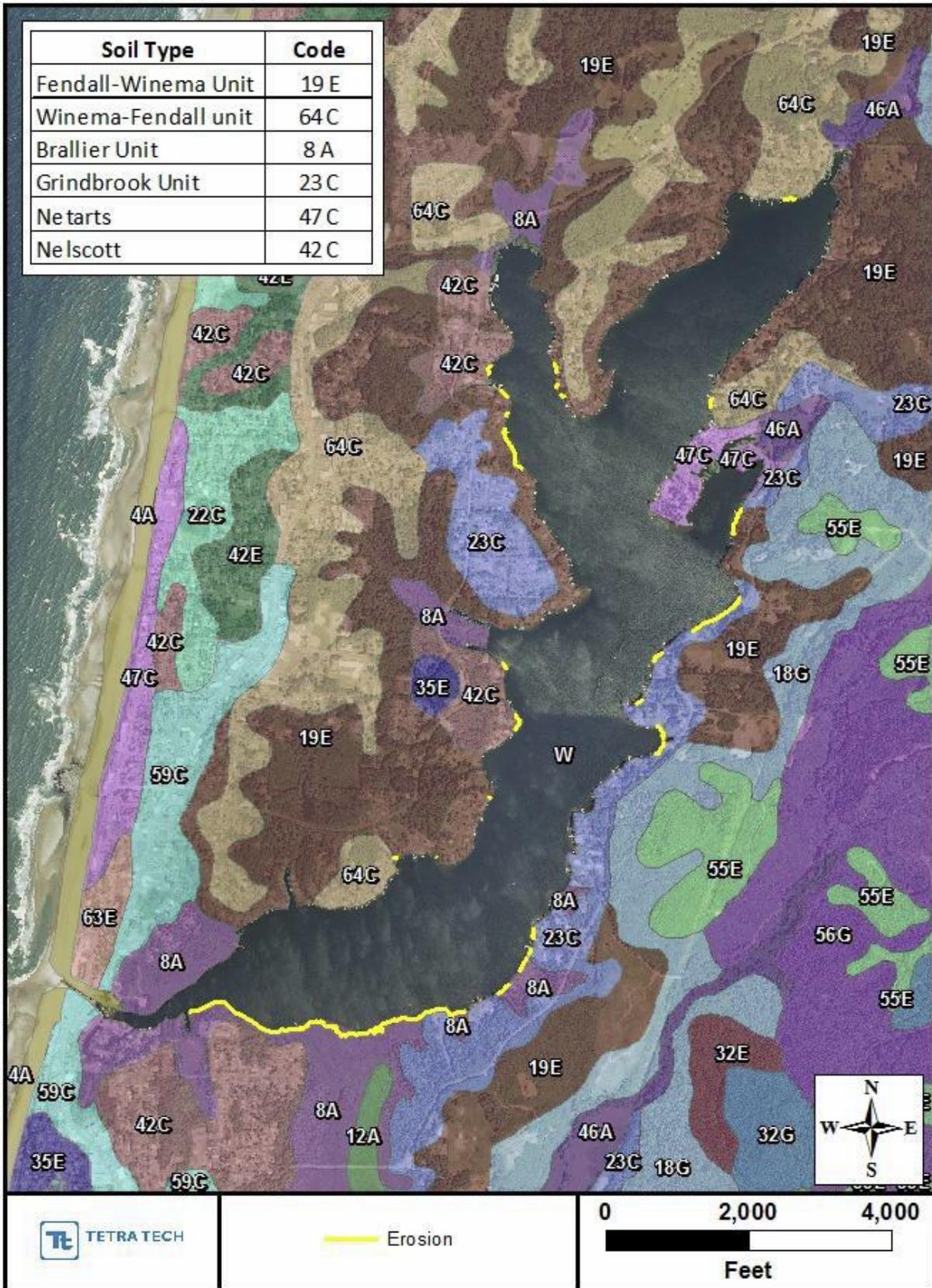


Figure 3 - From DLWID 2011 Erosion Study (Version 2)